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THE CONSOLIDATED
MINING AND SMELTING
COMPANY OF CANADA
LIMITED

Annual Report 1960



SAMPLING A LEAD FLOTATION CELL AT THE SULLIVAN CONCENTRATOR, KIMBERLEY, B.C.

Differential flotation is the key process used in separating the main mineral values in the Sullivan Mine ore. The successful application of this process, in 1920, ranks as one of the most significant milestones in the Company's history. By its use the huge resources of the Sullivan were converted from a deposit of doubtful economic value to one that assured the future of the Company for many years. At the Sullivan Concentrator the flotation process readily and efficiently separates the lead, zinc and iron values in the complex ore. The lead and zinc as concentrates are shipped to Trail. Part of the iron concentrate becomes the feed for the Company's new Iron Plant at Kimberley, while the balance is stockpiled for future use.

The Consolidated Mining and Smelting Company of Canada Limited

Head Office: 215 St. James St. West, Montreal, Canada

DIRECTORS

L. J. BELNAP	R. D. HARKNESS	†W. A. MATHER*
A. L. BISHOP	G. A. HART	R. S. McLAUGHLIN
N. R. CRUMP*	R. HENDRICKS*	R. H. McMASTER*
GORDON FARRELL	W. S. KIRKPATRICK*	R. D. PERRY
R. E. STAVERT*	H. G. WELSFORD	

*Member of Executive Committee

†DECEASED 2ND JANUARY, 1961

OFFICERS

R. E. STAVERT <i>Chairman</i>	W. S. KIRKPATRICK <i>President</i>	
N. R. CRUMP <i>Vice-President</i>	R. HENDRICKS <i>Executive Vice-President</i>	R. D. PERRY <i>Vice-President and General Manager</i>
G. A. WALLINGER <i>Vice-President and Comptroller</i>	W. G. JEWITT <i>Vice-President in Charge of Mines</i>	D. D. MORRIS <i>Assistant General Manager</i>
F. L. HALLAM <i>Secretary-Treasurer</i>	L. O. REID <i>Assistant Secretary</i>	K. E. CLARE <i>Assistant Treasurer</i>

TRANSFER AGENTS

THE ROYAL TRUST COMPANY, MONTREAL
THE ROYAL TRUST COMPANY, VANCOUVER
THE TORONTO GENERAL TRUSTS CORPORATION, TORONTO
BANK OF MONTREAL TRUST COMPANY, NEW YORK

REGISTRARS

MONTREAL TRUST COMPANY, MONTREAL
MONTREAL TRUST COMPANY, VANCOUVER
CROWN TRUST COMPANY, TORONTO
CHEMICAL BANK NEW YORK TRUST COMPANY, NEW YORK

COMPARATIVE HIGHLIGHTS

	1960	1959	1958	1957	1956
Sales of all products	\$115,649,000	\$110,084,000	\$103,900,000	\$118,858,000	\$135,732,000
Net profit.	23,498,000	16,704,000	14,018,000	18,538,000	30,029,000
Net profit per share	\$1.43	\$1.02	\$0.86	\$1.13	\$1.83
Dividends declared.	16,380,000	13,104,000	13,104,000	22,113,000	22,027,000
Dividends per share	\$1.00	\$0.80	\$0.80	\$1.35	\$1.65
Depreciation	9,700,000	9,392,000	9,599,000	9,536,000	9,684,000
Income, mining and property taxes. . . .	15,950,000	12,243,000	8,756,000	11,083,000	17,931,000
Working capital	96,149,000	95,925,000	92,318,000	84,933,000	81,879,000
Cash and marketable securities	65,704,000	66,580,000	56,946,000	57,631,000	58,682,000
Inventories of raw materials and products .	30,943,000	27,476,000	27,456,000	26,654,000	25,113,000
Net capital expenditures	16,501,000	7,895,000	2,463,000	2,963,000	5,927,000
Number of employees	7,351	6,985	7,101	7,291	7,814
Number of shareholders	35,007	34,481	34,073	32,881	30,431

OUTPUT OF PRINCIPAL PRODUCTS

YEAR	(1) Lead Short Tons	(1) Zinc Short Tons	(1) Gold Ozs.	(1) Silver Ozs.	Cad- mium Short Tons	Bis- muth Short Tons	(1) Tin Short Tons	Solid Fertilizer Short Tons	Liquid Fertilizer Short Tons
1894 to 1950	4,877,657	3,312,731	3,275,664	247,465,135	6,462	1,802	3,571	4,903,824	
1951.	162,712	164,513	74,347	14,417,391	542	104	173	557,776	
1952.	183,389	161,357	84,347	12,965,511	338	71	106	593,455	
1953.	166,356	185,859	91,321	16,144,791	420	36	348	599,996	
1954.	166,379	147,776	96,395	11,901,184	467	113	173	693,949	595
1955.	149,795	190,910	89,071	10,082,187	759	80	252	678,802	10,193
1956.	149,262	193,041	97,428	11,583,530	884	78	328	673,044	20,449
1957.	144,017	189,295	95,403	10,877,532	901	73	400	630,622	32,373
1958.	134,827	193,514	69,962	12,875,160	643	86	360	656,697	45,714
1959.	140,881	194,499	66,117	9,367,029	838	91	246	620,162	56,046
1960.	160,079	194,989	77,832	8,690,244	918	124	290	664,132	61,942
1894 to date	6,435,354	5,128,484	4,117,887	366,369,694	13,172	2,658	6,247	11,272,459	227,312

(1) Includes metal sold in concentrates and unrefined products.

55th ANNUAL REPORT OF THE DIRECTORS

MONTREAL, P.Q., 6TH MARCH, 1961.

To the Shareholders of The Consolidated Mining and Smelting Company of Canada Limited.

During the past year, the general performance in all phases of the Company's operations was good and resulted in an increase in net earnings of 41% compared with the previous year. All units of our production divisions were operated at maximum rates consistent with inter-plant integrations, with the exception of the lead plants as the markets for lead failed to show the improvement that had been expected. As 1960 drew to a close, growing world inventories of lead and zinc caused a sharp drop in the prices of these metals.

The consolidated financial statements and Auditors' Report and other information covering the affairs of the Company for the year ended 31st December, 1960 follow.

FINANCIAL

Consolidated revenue from all sources amounted to \$117,254,540 in 1960 compared with \$111,491,771 in 1959. Of this, \$115,648,673 was from the sales of products compared with \$110,084,379 in 1959.

After providing for income and mining taxes and depreciation of plants, the consolidated net profit for the year was \$23,497,740. For the year, regular dividends of \$0.80 per share and extra dividends of \$0.20 per share were declared amounting to \$16,380,344.

Compared with 1959, the higher earnings resulted from an increase in the price of zinc, together with improved returns from lead and fertilizers. Labour rates again showed an increase over the previous year in accordance with the existing labour contracts. Costs of operating supplies remained about the same but overall production costs were lower than in 1959. Inventories were considerably higher than at the end of last year, due mainly to an increase in stocks of lead in all forms and a planned accumulation of fertilizer products in line with the seasonal market pattern.

The revenue from export sales continued to be affected by the discount on United States funds and the pound sterling in relation to Canadian currency. During 1960, the average discount of the United States dollar under the Canadian dollar was $3\frac{1}{2}\%$ compared with $4\frac{3}{4}\%$ in 1959.

The consolidated net capital expenditures during the year amounted to \$16,500,902. The larger items were pig iron plant \$5,636,000, urea plant \$3,389,000, and chlor-alkali plant \$2,493,000.

During the year, \$11,000,000 was transferred from Unappropriated Surplus to Appropriated Surplus. This latter account represents that portion of earnings retained in the business and invested in plant, property and other assets at the end of the year.

At the year-end, working capital amounted to \$96,149,000, an increase of \$224,000 during the year, accounted for in the following summarized statement of source and application of funds:

Sources:

Net profit	\$23,498,000
Add: Charges deducted in determining net profit not requiring an outlay of funds:	
Depreciation	9,700,000
Net decrease in sundry non-current items	82,000
	<hr/> \$33,280,000

Applications:

Dividends declared	\$16,380,000
Net capital expenditures	16,501,000
Reduction of liability for deferred income taxes	30,000
Increase in deferred charges	145,000
	<hr/> \$33,056,000
Increase in working capital.	\$ 224,000

METAL PRODUCTION AND SALES

Lead produced amounted to 160,079 tons compared with 140,881 tons in 1959. There was a substantial increase in the inventories of refined lead and lead-bearing materials in process at the end of 1960 as compared with 1959. This accounted for most of the total increase in inventories mentioned under "Financial". Zinc production was 194,989 tons compared with 194,499 tons in 1959 and represents continuing capacity operation of the Zinc Department. At the year-end, inventories of zinc in all forms were at minimum working levels. In December, the 5,000,000th ton of zinc was cast after over 44 years of uninterrupted operation.

Of the combined lead-zinc production of 355,068 tons, approximately 67% was derived from Sullivan concentrates, 14% from concentrates from other company mines, 10% from the re-treatment of stockpiles of zinc plant residues and lead blast furnace slag, and 9% from purchased ores and concentrates. In 1960, these purchased materials were principally from Canadian shippers and cost \$6,303,000 compared with \$7,983,000 in 1959.

World consumption of lead in 1960 failed to increase as expected a year ago, being only slightly higher than in 1959 and continuing below production. Consumption declined in Canada and the United States as compared with 1959 but increased in other countries. In the United States, high inventories persisted and, in other countries outside

of Europe, producers' stocks increased. World consumption of zinc showed improvement over 1959 but supplies were greater so that stocks increased further during the year. As in the case of lead, there was a decrease in consumption in Canada and the United States but this was more than counterbalanced by increases in other countries.

The average prices of both metals were higher than in 1959 in all major markets, except for lead in the United States. Prices were stable until towards the end of the year when the continuing pressure of stocks caused a sharp downward trend in all markets. For 1960, average prices on the London Metal Exchange were: zinc 10.86¢ and lead 8.77¢ compared with 9.88¢ and 8.51¢ respectively in 1959. Year-end prices were: zinc 9.80¢ and lead 7.78¢ all in Canadian currency per pound.

Cominco sales in North America were below 1959 levels on account of lower consumption, but compensating increases were achieved in the United Kingdom, Japan, India and other off-shore market areas. Total sales of both metals were thus up to expectations but the distribution pattern was changed. Of the total lead and zinc sold in 1960, about one-quarter was in Canada, one-quarter in the United States, 40% in the United Kingdom, and the remainder in other countries.

The import quotas imposed by the United States Government in 1958 continued unchanged throughout 1960. In view of the Report of the United States Tariff Commission submitted on 30th September, 1960, it appears that the quotas will remain in effect throughout 1961. At the request of the Canadian Government, the Company provided technical assistance at the meetings of the United Nations Lead-Zinc Study Group.

Silver production was 8,690,244 ounces compared with 9,367,029 ounces in 1959, the reduction being due to a decline in the purchase of ores and concentrates of high silver content. The whole output was marketed. The United States Treasury price of silver remained constant at 91⅜¢ per ounce throughout the year. Production of gold was 77,832 ounces compared with 66,117 ounces in 1959. As a result of arrangements negotiated during the year, a portion of the gold production was sold on the free market to obtain a higher yield. Sales of bismuth, cadmium, antimonial lead and tin concentrates were all in greater volume than in 1959 and prices received were higher except in the case of tin concentrates.

The production and sales of indium again showed an increase over the previous year. The electronic

materials plant at Trail completed its first full year of operation in 1960. In this small plant a number of metals of very high purity are produced for the electronics industry and converted into the various preforms and salts required by that industry. A number of new products were added to those already produced. Total sales of indium and electronic materials in all forms reached approximately \$1,000,000 which represents an increase of about 35% over 1959. Comprehensive market and economic studies indicated the desirability of locating an electronic materials plant in Spokane, Washington, to serve the United States market. This plant was scheduled for completion in March, 1961 and will be operated by our wholly-owned American subsidiary, Cominco Products, Inc. This subsidiary will also be the sole distributor in the United States of the Company's production of electronic materials.

CHEMICAL AND FERTILIZER PRODUCTION AND SALES

Solid fertilizer production totalled 664,132 tons compared with 620,162 tons in 1959, and liquid fertilizer production was 61,942 tons compared with 56,046. The combined production in 1960 constituted a new high volume both in total tonnage and also in contained plant food.

In North American fertilizer markets, highly competitive conditions continued throughout 1960, but towards the year-end there was some indication of a closer balance between supply and demand. Canadian sales were considerably higher than in 1959 in spite of continuing difficult conditions in agriculture. The increase in sales was mainly in the Prairies and was largely due to increased appreciation by farmers of the economic benefits accruing from the use of fertilizers.

Sales of liquid fertilizers in the United States again increased in line with the development program on these products. Sales of solid products were adversely affected by unfavourable weather conditions in the Midwestern area during the peak sales season, and by the continued growth of competitive production within California. Total sales were thus slightly below those of the previous year. While competitive marketing practices showed some improvement, discount and extended credit policies continued to be major factors in selling.

In off-shore markets, severe competition and relatively high transportation costs continued to

limit areas of profitable participation. However, the Company's competitive position was somewhat improved by making sales arrangements for shipment in bulk, combined with bagging at destination. This has been possible through the use of the new bulk-loading facilities at Port Moody, British Columbia, provided by a subsidiary of Pacific Coast Terminals Co. Ltd., itself a subsidiary of Cominco. As a result, participation has been maintained in the export areas of greatest interest. Important tonnages continued to be sold in India, Korea, Pakistan and Colombia, with lesser amounts in Hawaii, Guatemala, Philippines, Thailand and Peru. The sales to India and Pakistan were made to the Canadian Government under Colombo Plan aid to those countries.

The new urea plant at Calgary will allow additional high analysis liquid and solid products to be offered early in 1961. A substantial quantity has been sold for delivery to Pakistan in 1961 under the Colombo Plan program. Sales of sulphuric acid and sulphur dioxide increased during the year, and sales of ammonium nitrate for commercial use were well maintained.

MINING AND EXPLORATION

The tonnage of ore extracted from the Sullivan mine at Kimberley, British Columbia, for the year 1960, was 2,522,554 tons compared with 2,440,396 tons in 1959. The 500-foot extension to the main shaft was completed during the year and work started on a new lower level crushing chamber and conveyor gallery.

Production from the Bluebell lead-zinc mine at Riodel, British Columbia, was 255,571 tons compared with 251,366 tons in 1959. Shaft sinking to lower levels is progressing under the difficult conditions caused by the subterranean water flows referred to in previous years. At the H.B. zinc-lead mine near Salmo, British Columbia, production totalled 464,408 tons compared with 463,504 tons in 1959.

The Con mill at Yellowknife, Northwest Territories, treated 190,626 tons in 1960 compared with 191,299 tons in 1959. The ore treated was made up of 114,541 tons averaging 0.51 ounces of gold per ton from the Con mine and 76,085 tons averaging 0.72 ounces from the adjoining mine owned by Rycon Mines Limited, a subsidiary company.

The phosphate mines in Montana produced 403,506 tons of phosphate rock to meet the require-

ments of the Trail and Kimberley fertilizer operations. The comparable 1959 production was 372,743 tons.

No further work was done at the important zinc-lead property of Pine Point Mines Limited near Great Slave Lake, but extensive technical and economic studies have been made and discussions are currently proceeding with officials of the Canadian Government regarding the proposed construction of a railroad to this area.

Exploration in search of new mines was actively carried on throughout Canada and in the central and southwestern United States. During the year, 136 properties were examined, of which nine were optioned, and a further five properties were staked. A total of 38 properties were investigated by various methods of surface development including 41,537 feet of diamond drilling.

Underground exploration programs were carried on at three properties. In New Brunswick, at the Company's Wedge property, a vertical shaft was sunk to a total depth of 1,136 feet and extensive underground exploration carried out. The economics of preparing this property for the production of copper concentrates are now being studied. Underground work at the Double Ed copper property near Anyox, British Columbia, was completed without locating any new ore. No further work is planned on this property at present. At the Duncan Lake lead-zinc property in the Lardeau district of British Columbia a program of underground exploration was carried out, and has established the existence of commercial quantities of ore. Some further work on this property is planned for 1961.

On Vancouver Island, the mine of Coast Copper Company Limited, a subsidiary, is being prepared for production and, at Benson Lake nearby, a mill is being built by Cominco to treat ore from this mine. Operation at the rate of 750 tons per day is planned to commence in mid-1962. Arrangements have been completed for the sale of the copper concentrates for the first five years of operation.

Sunro Mines Limited (N.P.L.), in which the Company has a majority interest, has leased its copper property on Vancouver Island on a royalty-per-ton basis to Cowichan Copper Company Limited, who propose to start production in the latter part of 1961.

RESEARCH AND DEVELOPMENT

All major segments of the Company's research and development activity were expanded in 1960.

Cominco's technical research is principally concentrated at the main research centre in Trail where a wide range of basic and applied research and product and process development is undertaken. Use is also made of outside laboratory facilities, and research is carried on in co-operation with other firms through trade associations. In addition, the Company has its own market research and sales development organizations.

The development of new uses for lead and zinc is considered to be of major importance and has been aggressively pursued throughout the year. Work continued at the Trail metal fabrication plant and active attention was given to applications of lead and zinc products in the Company's own operations. Promotional and research programs of the various lead-zinc trade associations continued to gain momentum during 1960 with the Company taking an active and leading part in all phases. These programs have already shown commercial benefits in helping to maintain the use of zinc in automotive die-castings and lead in cable sheathing. Several promising new fertilizer products were developed and distributed for field and market tests. For the electronics industry, additional metals of extremely high purity were added to the product line, and trial quantities of compound semi-conductors were marketed. Thermo-electric materials of considerable promise have been developed and test quantities have been sold.

ENGINEERING, CONSTRUCTION AND NEW OPERATIONS

During 1960, construction of the first units of the pig iron plant at Kimberley was practically completed. By the year-end, small quantities of metal had been made and operating procedures for continuous production were being developed. The first sale of commercial grade pig iron was made in January, 1961. This is the first pig iron production in western Canada from western Canadian ore. Also, by the end of 1960, market and economic studies were nearly completed and engineering estimates were well advanced in preparation for the next stage of this project.

At Calgary, the new urea plant was completed except for certain ancillary facilities. Operation commenced in October and the first shipment left the plant in December.

Construction of the chlor-alkali plant at Trail was nearly complete at the end of the year. This plant is being built to supply caustic soda and

chlorine to Celgar Limited for their new pulp mill near Castlegar, British Columbia. It will also produce caustic potash for use in fertilizers.

National Hardware Specialties Limited, a wholly-owned subsidiary, acquired the plating facilities of The Luster Corporation of Canada, Limited in January, 1960, and the die-casting equipment and business of Ontario Steel Products Limited in July. These operations are feeling the highly competitive conditions which prevail in the die-casting business in Canada.

The Company's hydro-electric plants on the Kootenay and Pend-d'Oreille Rivers operated satisfactorily throughout the year with water flows adequate for power requirements. Energy generated amounted to 2,424 million kwh compared with 2,230 million kwh in 1959. Improvements in economy and efficiency were obtained by the continuing program of automation. Sales of power to West Kootenay Power and Light Company, Limited, and the British Columbia Power Commission continued to increase during the year, and in October the delivery of power to Celgar Limited commenced.

PERSONNEL

Labour supply at all operations was adequate. The number of employees on the active roll at the year-end was 7,351 compared with 6,985 at the end of 1959. The increase was due to the construction work in progress and to the inclusion for the first time of employees of National Hardware Specialties Limited. As wage negotiations in 1959 at all the Company's major operations in British Columbia and at the Con Mine resulted in three-year contracts, there were no negotiations at these operations in 1960 and none are scheduled for 1961. At the Calgary plant, wage contracts expired on 1st November, 1960, and negotiations toward new contracts were in progress at the year-end. At Montana Phosphate Products Limited in Montana, a new three-year agreement was concluded in February, 1960, retroactive to the expiry of the previous agreement on 30th June, 1959.

During 1960, the Company contributed \$1,820,000 to the Pension Fund Society. At 31st December, the fund which provides non-contributory pensions to retired employees amounted to \$41,110,000. Since inception of the pension scheme in 1926, 1,423 employees have retired on service pensions. At the end of the year, 860 former employees and widows

of former employees were receiving pensions from the Society as compared with 816 at the end of 1959.

For the third successive year, a new low record of lost-time accidents was established. As a result of its excellent safety record in 1959, the H.B. zinc-lead mine had the distinction of being a co-recipient of the John T. Ryan trophy in 1960 for the second successive year.

STAFF CHANGES

Effective 1st January, 1961, Mr. R. J. Armstrong, formerly Assistant to the Vice-President in Charge of Mines, was appointed Manager of Exploration, and Mr. L. Telfer, formerly Manager of Exploration, was appointed Consulting Engineer, Exploration.

It is with deep sorrow that we record the death on the 2nd January, 1961 of Mr. William A. Mather. Mr. Mather became a Director of the Company and a Member of the Executive Committee of the Board in April, 1948. In April, 1951, he was elected Vice-President of the Company, a position which he held until April, 1959. During his many years of service with the Company, Mr. Mather was always keenly interested in its growth and progress. His wide experience and interest in the development and growth of Canada was of inestimable value to the Company. His wise counsel and sound advice will be greatly missed.

The Directors wish to record their appreciation of the co-operation and efficient service of the employees throughout the Company's entire organization.

On behalf of the Board,



President.

The Consolidated Mining and Smelting Company Limited

AND ITS WHOLLY-OWNED SUBSIDIARIES

CONSOLIDATED BALANCE SHEET WITH COMPARATIVE FIGURES

ASSETS

	1960	1959
Current Assets:		
Cash	\$ 4,179,800	\$ 3,340,495
Notes, loans and other short term investment contracts	28,913,315	12,547,068
Government, municipal and commercial bonds, at cost or lower (market value: 1960, \$32,746,638; 1959, \$50,145,819)	32,610,607	50,692,643
Accounts receivable and accrued revenue, less allowance for doubtful accounts	14,340,817	10,616,735
Prepaid charges	4,148,857	4,137,457
Inventories of raw materials and products, valued at cost or market, whichever is lower	30,942,935	27,476,211
Stores and materials, valued at cost less depreciation.	7,087,875	7,603,510
	<u>\$122,224,206</u>	<u>\$116,414,119</u>
Investments and Sundry Non-Current Assets:		
Unconsolidated subsidiary companies:		
Shares	12,290,036	10,633,307
Bonds	48,600	709,960
Advances	2,955,922	3,629,439
	<u>15,294,558</u>	<u>14,972,706</u>
Less accumulated depreciation of investments in unconsolidated subsidiary mining companies	5,577,315	5,577,315
	<u>9,717,243</u>	<u>9,395,391</u>
Shares in other companies	306,015	306,015
Deferred charges	281,692	137,030
Sundry loans and accounts receivable	639,987	724,467
	<u>10,944,937</u>	<u>10,562,903</u>
Property, Buildings and Equipment:		
Mines, mineral rights and mining investments at cost (including shares in other mining companies: 1960, \$1,715,996; 1959, \$1,696,716) and land, buildings and equipment at cost, less depreciation written off and sales at realized prices	146,139,641	140,608,967
Less accumulated depletion and depreciation.	79,481,390	80,429,605
	<u>66,658,251</u>	<u>60,179,362</u>
	<u>\$199,827,394</u>	<u>\$187,156,384</u>

g Company of Canada Limited

PSIDIARY COMPANIES

HEET AS AT DECEMBER 31, 1960

URES FOR 1959

LIABILITIES

	1960	1959
Current Liabilities:		
Accounts payable.	\$ 8,987,363	\$ 7,715,513
Accounts payable—unconsolidated subsidiary companies.	109,567	29,944
Payments received in advance on sales contracts	52,632	373,993
Estimated income and mining taxes payable	8,719,941	5,801,299
Dividends payable	8,205,250	6,568,191
	<u>\$ 26,074,753</u>	<u>\$ 20,488,940</u>
Accumulated Tax Reductions Applicable to Future Years	50,000	80,000
Shareholders' Equity:		
Capital:		
Authorized 20,000,000 shares of no par value: issued and fully paid 16,381,645 shares	23,966,890	23,966,890
Insurance reserve.	3,927,182	3,929,381
Appropriated surplus	91,000,000	80,000,000
Unappropriated surplus	54,808,569	58,691,173
	<u>173,702,641</u>	<u>166,587,444</u>
Commitments and Contingent Liabilities:		
	1960	1959
Commitments under construction in progress estimated not to exceed	\$ 800,000	\$5,000,000
Sundry guarantees, commitments and claims (estimated).	1,600,000	1,450,000
On behalf of the Board:		
R. E. STAVERT		
W. S. KIRKPATRICK } <i>Directors</i>	<u>\$199,827,394</u>	<u>\$187,156,384</u>

The Consolidated Mining and Smelting Company of Canada Limited

AND ITS WHOLLY-OWNED SUBSIDIARY COMPANIES

CONSOLIDATED STATEMENT OF PROFIT AND LOSS

FOR THE YEAR ENDED DECEMBER 31, 1960
(WITH COMPARATIVE FIGURES FOR 1959)

	1960	1959
Sales revenue	\$115,648,673	\$110,084,379
Other revenue	1,605,867	1,407,392
	<u>117,254,540</u>	<u>111,491,771</u>
Cost of sales:		
Raw materials and products on hand at beginning of period .	27,476,211	27,456,268
Production, selling and general expenses (legal remuneration 1960, \$128,681; 1959, \$119,182)	69,829,406	68,207,677
Customs ores and other materials purchased	7,786,584	9,858,827
Executive officers' fees and remuneration	352,130	337,566
Directors' fees and remuneration	20,960	20,873
	<u>105,465,291</u>	<u>105,881,211</u>
Deduct raw materials and products on hand at end of period	30,942,935	27,476,211
	<u>74,522,356</u>	<u>78,405,000</u>
	<u>42,732,184</u>	<u>33,086,771</u>
Add:		
Income from investments	3,874,175	3,107,004
Net profit from sale of securities	291,541	2,919
	<u>46,897,900</u>	<u>36,196,694</u>
Deduct:		
Provision for depreciation of plant and equipment	9,700,160	9,392,384
Provision for income and mining taxes (see note below) . .	13,700,000	10,100,000
	<u>23,400,160</u>	<u>19,492,384</u>
Net Profit, Carried to Unappropriated Surplus Account	<u>\$ 23,497,740</u>	<u>\$ 16,704,310</u>

NOTE: It is estimated that the taxes actually payable for 1960 will amount to \$13,730,000. The difference between that amount and \$13,700,000 results from transfers of income, for tax purposes only, between years and has been taken into account in determining the balance sheet item "Accumulated Tax Reductions Applicable to Future Years", which represents the net tax postponement at December 31, 1960 from such transfers.

CONSOLIDATED STATEMENT OF EARNED SURPLUS

AS AT DECEMBER 31, 1960

(WITH COMPARATIVE FIGURES FOR 1959)

	1960	1959
Appropriated Surplus invested in the Company's undertakings:		
Balance at beginning of period	\$ 80,000,000	\$ 80,000,000
<i>Add:</i>		
Transfer from unappropriated surplus	11,000,000	—
Balance at end of period, per Balance Sheet	\$ 91,000,000	\$ 80,000,000
Unappropriated Surplus:		
Balance at beginning of period	\$ 58,691,173	\$ 55,957,239
<i>Add:</i>		
Balance of net profit per statement of profit and loss . . .	23,497,740	16,704,310
	82,188,913	72,661,549
<i>Deduct:</i>		
Appropriation for dividends, \$1.00 per share in 1960 (1959 —80¢)	16,380,344	13,104,262
Transfer to appropriated surplus	11,000,000	—
Excess over book value of purchase price of shares in a sub- sidiary company	—	866,114
Balance at end of period, per Balance Sheet	\$ 54,808,569	\$ 58,691,173

AUDITORS' REPORT

Statement as to Unconsolidated Subsidiary Companies

Except to the extent of dividends received from unconsolidated subsidiary companies and additions made to the allowance for depreciation of investments in subsidiary mining companies, neither profits nor losses of unconsolidated subsidiaries, so far as they concern the holding company, have been dealt with in the accounts of the holding company for 1960 or prior years. For 1960 the excess of the holding company's proportion of profits over the dividends received is greater than its proportion of losses of unconsolidated subsidiary companies for which no allowance has been made. The balances of profits (less dividends) and losses, as well as development and maintenance expenses of certain unconsolidated subsidiary mining companies which were not in production, are carried forward in the accounts of the subsidiary companies.

VANCOUVER, B.C., FEBRUARY 24, 1961.

HELLIWELL, MACLACHLAN & Co.,
Chartered Accountants.

Auditors' Report to the Shareholders

We have examined the consolidated balance sheet of The Consolidated Mining and Smelting Company of Canada Limited and its wholly-owned subsidiary companies as at December 31, 1960, and the related statements of profit and loss and earned surplus for the year ended on that date and have obtained all the information and explanations we have required. Our examination has included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion, according to the best of our information and the explanations given to us and as shown by the books of the companies, the balance sheet and the related statements of profit and loss and earned surplus are properly drawn up so as to exhibit a true and correct view of the state of the affairs of the company and its wholly-owned subsidiary companies as at December 31, 1960, and the results of their operations for the year ended on that date, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

VANCOUVER, B.C., FEBRUARY 24, 1961.

HELLIWELL, MACLACHLAN & Co.,
Chartered Accountants.

DIVISIONS

Chemical and Fertilizer Operations

E. A. G. COLLS, *Manager* Trail, B.C.

Chemical and Fertilizer Sales

A. WILKINSON, *Manager* Montreal, P.Q.

Comptroller's

G. A. WALLINGER, *Vice-President and Comptroller* . . Montreal, P.Q.

Engineering

J. V. ROGERS, *Manager* Trail, B.C.

Legal

C. H. B. FRERE, *General Solicitor* Montreal, P.Q.

Metallurgical Operations

R. R. McNAUGHTON, *Manager* Trail, B.C.

Metal Sales

H. T. FARGEY, *Manager* Montreal, P.Q.

Mines and Exploration

W. G. JEWITT, *Vice-President i/c of Mines* Trail, B.C.

Personnel

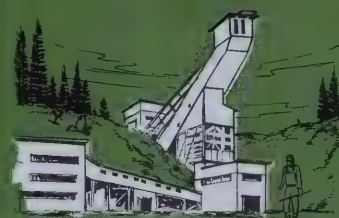
P. F. McINTYRE, *Manager* Trail, B.C.

Purchasing

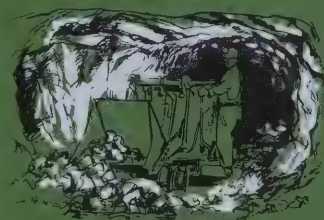
A. L. IRWIN, *Manager*. Trail, B.C.

Research and Development

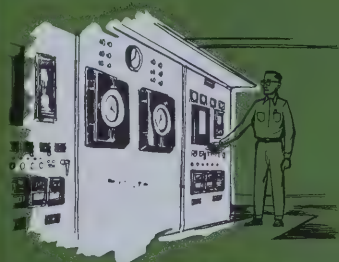
A. O. WOLFF, *Director*. Montreal, P.Q.



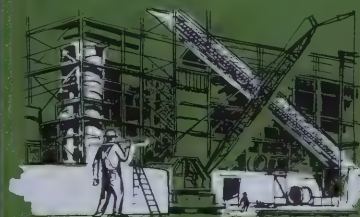
BLUEBELL HEADFRAME



MUCKING



INSTRUMENTATION



NEW PLANT
CONSTRUCTION



FERTILIZER STORAGE

PRODUCTS

METALS

Lead • Zinc
Bismuth • Cadmium
Indium • Gold
Silver • Antimonial Lead
Pig Iron

FABRICATED METAL PRODUCTS

Zinc Extrusions
Cadmium and Zinc Plating Anodes
Zinc Anodes for Cathodic Protection

ELECTRONIC MATERIALS

High Purity Metals* (99.999% and 99.9999% Pure)

Antimony • Arsenic
Bismuth • Cadmium
Indium • Lead
Silver • Tin
Zinc

Compound Semiconductors*

Indium Antimonide (Polycrystalline and Monocrystalline)

High purity gold and aluminum preforms also available.

**Available in fabrications to customers' specification.*

CHEMICAL FERTILIZERS

Ammonium Sulphate
Ammonium Nitrate
Urea
Anhydrous and Aqua Ammonia
Nitrogen Solutions
Ammonium Phosphates
Ammonium Nitrate-Phosphates
Complete Fertilizers
Ammonium Phosphate Solutions
Phosphoric Acid

CHEMICALS

Ammonia • Urea
Chlorine • Caustic Soda
Sulphuric Acid • Oleum
Sulphur Dioxide

TADANAC BRAND
COMINCO BRAND
ELEPHANT BRAND

are registered
trade marks of the Company

PRINCIPAL ACTIVE SUBSIDIARY COMPANIES

WHOLLY OWNED

Cominco Products, Inc. — Spokane, Washington, U.S.A.

Markets Cominco products in the U.S.A., mixes and distributes liquid fertilizers in the Pacific Northwest. During the year 1961 it will begin the manufacture and distribution of high purity metals and inter-metallic compounds for the electronics industry.

Montana Phosphate Products Company — Garrison, Montana, U.S.A.

Holds and mines deposits of phosphate rock to supply Cominco's fertilizer plants at Trail and Kimberley, B.C.

National Hardware Specialties Limited — Dresden, Ontario

Owns and operates a zinc die-casting plant and through its subsidiary, Luster Corporation of Canada Limited, operates a plating plant at Wallaceburg, Ontario.

OTHERS

West Kootenay Power and Light Company, Limited — Trail, B.C.

Owns and operates a hydro-electric power plant and distributes electric power for public utility purposes over an area within a radius of 150 miles from the city of Rossland, B.C. Under management agreement operates five hydro-electric power plants for Cominco.

Pacific Coast Terminals Limited — New Westminster, B.C.

Owns and operates storage warehouses and deep sea dock facilities at New Westminster. Its subsidiary, Pacific Coast Bulk Terminals Limited, owns and operates bulk loading facilities situated on Burrard Inlet near Port Moody, B.C.

Rycon Mines Limited — Head Office — Yellowknife, N.W.T.

Owns and operates a gold mine adjoining Cominco's Con Mine in the Yellowknife Mining District of the Northwest Territories.

Coast Copper Limited — Head Office — Trail, B.C.

Owns a copper property near Jeune Landing in the northern part of Vancouver Island which is currently being equipped for production at a rate of 750 tons per day.



Lead concentrates are converted to material suitable for lead blast furnace feed by sintering. In this process a continuously moving bed of concentrate is ignited by a natural gas flame. The sulphur in the concentrate is driven off as sulphur dioxide gas and used for sulphuric acid manufacture. The material remaining on the bed forms into cinder-like lumps providing ideal blast furnace feed.

One of the many new and interesting phases of the Company's expanding activity in the field of electronic materials is growing single crystals of ultra pure indium antimonide. The crystal seen in the centre of the conical glass flask is being slowly "pulled" from a bath of molten indium antimonide. To prevent contamination it is being "grown" in a hydrogen atmosphere. The final product will be 99.999999% pure. This material has been used in infra-red detectors for guided missiles and is showing promise in certain components used in computation and communication equipment.



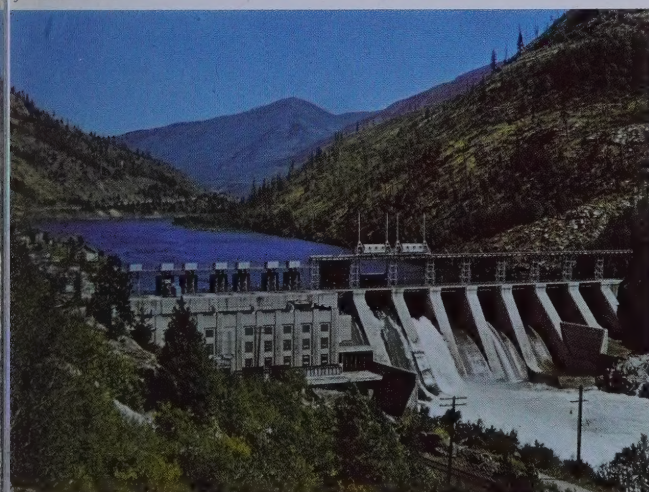
OPERATIONS and INTERESTS



The new urea plant at Calgary, Alta., comprises a 100-ton-per-day manufacturing unit and a dome-shaped storage building. The plant is adjacent to and integrated with the Company's other fertilizer operations at Calgary. Production of this product is an important addition to the Company's Elephant Brand fertilizer line.

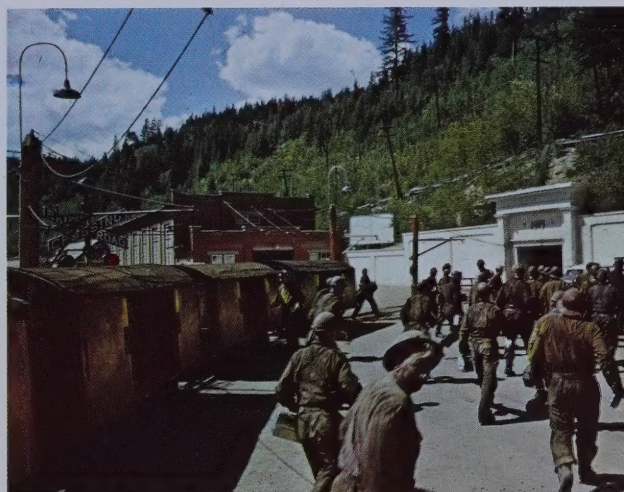


The typical diamond drill rig set-up shown above is a pole tripod with platform and necessary tackle to permit connecting or disconnecting the drill rod section. It is an important tool in determining whether or not a prospect or favourable mineralized area warrants further development.



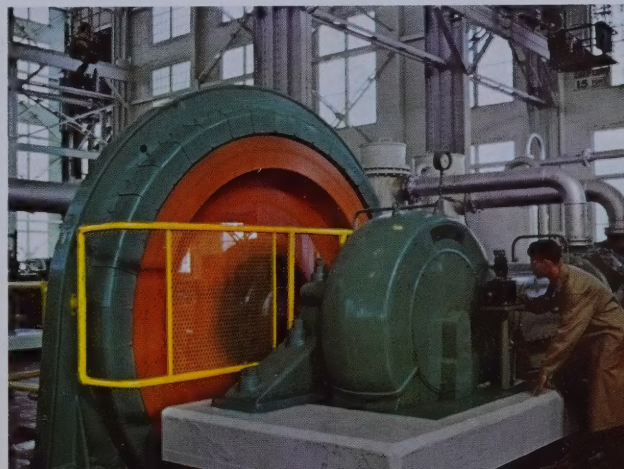
The Brilliant power plant, developing 110,000 h.p. is located on the picturesque Kootenay River near its confluence with the Columbia River, about 20 miles from Trail. It was built during World War II and is one of six major power plants owned by Cominco or its subsidiary, the West Kootenay Power and Light Company, Limited.

Only a few years ago all zinc cast at Trail was hand poured. Today this process is almost fully automatic. The zinc flows from the furnace into a small ladle which automatically tips into moulds on a continuous travelling mechanism that looks somewhat like an escalator. While the moulds with the freshly poured zinc are travelling on the casting machine they are cooled, the zinc slabs solidify and are automatically discharged from the moulds.



The 3900-level portal at the Sullivan Mine at Kimberley, B.C. provides the main access route for men and supplies to the mine's huge underground workings. Mine employees travel the 2-mile distance from the portal to the main underground station in covered cars. Over 800 men are employed at the mine. Ore from the mine comes out by way of a special haulage tunnel which is at a low level and connects directly with the Sullivan Concentrator.

This large motor drives a compressor at the chemical plants at Trail, B.C. It is part of a process used for the recovery of nitrogen from the air. Nitrogen is very important plant food and in a chemical form in which it is readily usable by plants it is present in all Elephant Brand fertilizers.



COMINCO